AR8000
Envelope Feeder
Technical / Operator
Manual

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AR8000
Overview

The AR8000 is designed to continuously feed envelopes / card stock simply by adding media to the Feed Area of the AR8000. The unit may be connected to the Risograph for envelope / card feeding or removed by the operator utilizing the Risograph as a stand-alone unit when feeding normal paper or NCR applications. The AR8000 operating speed automatically adjusts to the speed of the Risograph. This unit feeds from the bottom of the stack allowing the operator to continuously add media without interrupting machine operation.

The AR8000 Operation Panel incorporates a Mode switch which allows the operator to set-up the unit for feeding different media. It also allows a technician to operate the unit off-line when troubleshooting problems. The Speed dial will vary the AR8000 speed during test or set-up to create realistic conditions when feeding different stocks. The Feed switch activates the Feed Clutch (when the Mode selection switch is ON) giving operators/technicians manual feed control. Manual Feed control aids operators and technicians in adjusting or isolating problem areas when skewing, misfeeding or tracking occurs.

Simple thumb screw and sliding feed guide adjustments are provided to accommodate different media applications. (see set-up adjustment procedures)

Preventative Maintenance / Service recommendation intervals are equal to that of the Risograph.

AR8000 Specifications

System/Process	Roll-up envelope / card feeder designed to enhance the paper feeding capabilities of the GR3750 for increased productivity and versatility. Comes standard with required stand.
Feeding Speed	Equal to the speed of the Digital Duplicator.
Stock Size	Minimum 3” X 5”; A6 (76.2mm X 127mm) Maximum 11.7” X 13”; A3 (297mm X 143mm)
Stock Weight	Minimum: 20lb. envelopes Maximum: 110lb. Index
Registration	+/- 1mm
Feed Capacity	Initial envelope capacity: 500 (#10 Business Envelopes) Continuous top-load, bottom-feed mechanism
Accessories	Optional Conveyor at receiving end
Compatibility	Compatible with GR3750 and RISO Stand S-8925
Electrical	110V/60Hz; 220V/50Hz
Environment	Temperature: 50 - 90 Fahrenheit Humidity: 30% - 90% Relative Humidity
Shipping Weight	100lbs.
Dimensions	28.5”W x 17.75”D x 30”H (excluding slide guides)

Specifications are subject to change without notice

AR8000 Preventative Maintenance

Description	Part Number	Replacement Interval					
		100K	200K	300K	400K	500K	600K
Separators (5)	90-103-09	X	X	X	X	X	X
Feed Rollers (7)	90-102-21			X			X
Pick-Up Rollers (4)	56-101-02			X			X
Pressure Roller (3)	94-110-02			X			X

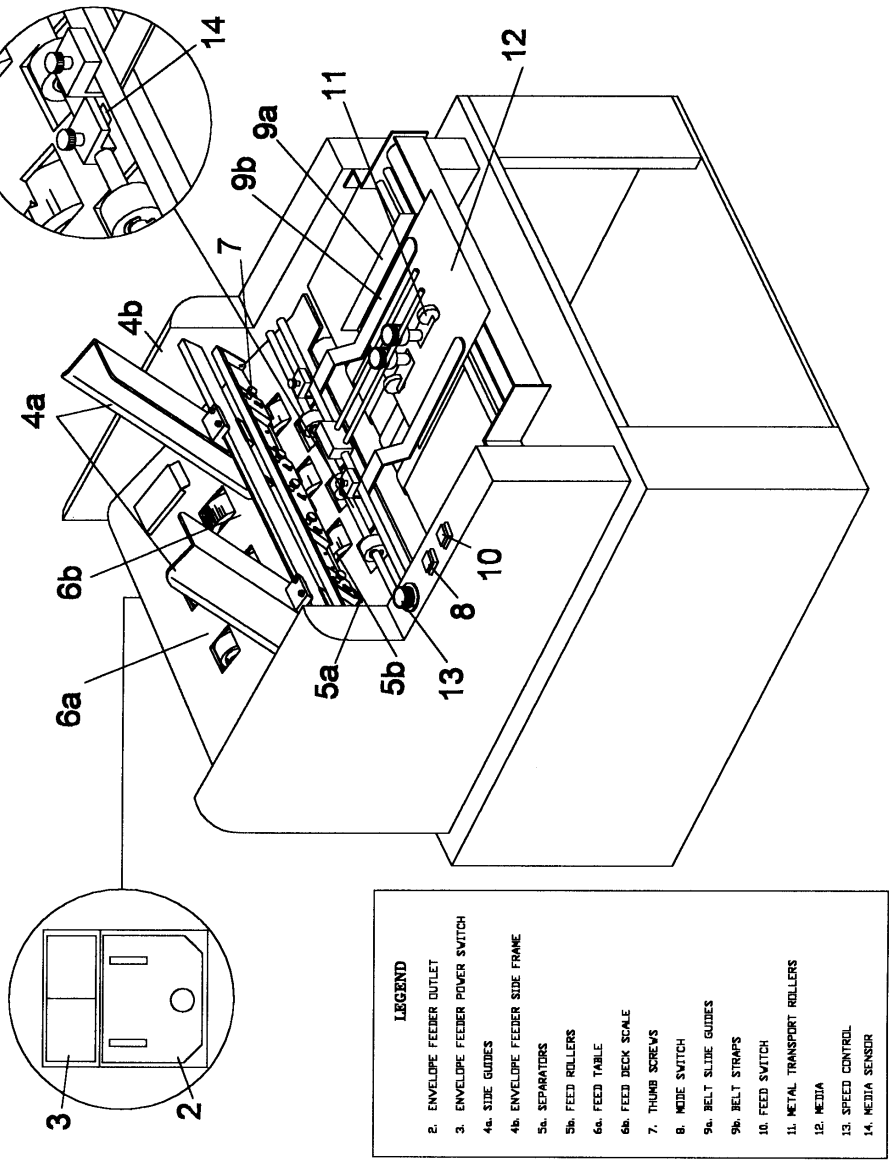
Recommended Dealer Stock AR8000		
Timing Belts	123-934-2	
Circuit Breaker	123-137-1	
Bearing Housing	123-140-1	
Castors	123-277-1	
Fuses (1Amp. _ x _)		
Main PCB	65-5000-0	
Power Supply PCB	123-1075	
Interlock Switch	123-1141	
Transport Belts	123-1071 / 123-1072	
Main Switch	63-500-07	
Speed Control Switch	123-390	

Optional Conveyor Unit		
Conveyor Belts	123-309	set
Main PCB	90-100-500	
Drive Motor	123-913	
Main Switch	123-644	
Speed Potentiometer	CD-301-20	

Interface Kit AR8000 Part # 65-500-50

Contents:		**Quantity**
Wire Harness, Interface	65-500-20	1
Wire Splice	123-1171	2
Interface Cable	65-500-20	1
Cable Tie	123-113	4
Hook Weldment, LH	65-301-09	1
Hook Weldment, RH	65-301-10	1
Screw, 8-32 X _ FH Phil.	123-126	4

Component Location



AR8000
Envelope Feeder Installation Guide

1. Raise the Paper Feed Table and turn off power.
2. Remove the Rear Cover and left Cable Blind Plate Cover.
3. Attach the Envelope Feeder's Harness (RISO Internal Harness) to the left access hole.
   Note: Keep the flange of the connector toward the outside of the plate.
4. Connect the socket connector of the harness to the RISO Motor Control PCB - CN5.
   Note: The SF 3000 can NOT be used with the Astro Envelope Feeder
5. Connect the RED wire to CN-3 15 (red wire) on the Motor Control PCB using a wire crimp connector.
6. Connect the Yellow wire to CN9-44 (yellow wire) on the System PCB using a wire crimp connector.
7. Attach the Envelope Feeder - RISO Mounting Guide Plates to the RISO frame below the raised Feed Table. All mounting screws should face the rear of the Risograph.
8. Lower the Feed Table.
9. Place the Envelope Feeder on the Envelope Feeder Console placing the bearing in the guide rail and securing the rear of the unit with the bracket and mounting screws.
10. Install the Risograph rear cover.
11. Connect the Envelope Feeder Communication Cable from the rear of the RISO to the Envelope Feeder. The Phone style connector connects to the Envelope Feeder below the right rear cover of the Feeder's Feed Tray.
12. Mount the Envelope Feeder to the RISO by sliding the alignment pins of the Feeder into the Mounting Brackets installed on the RISO Feed Tray.
13. Level the Envelope Feeder using the Feeder's Casters.
    Note: The front casters should barely contact the floor. This will ensure that the Envelope Feeder locks into the mounting bracket.

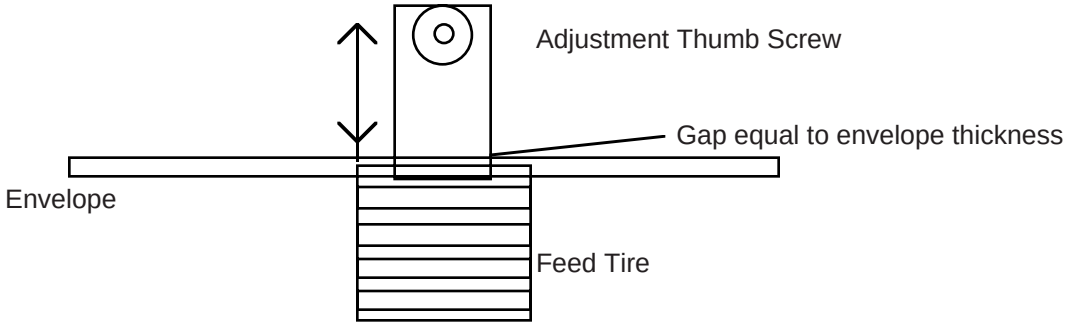
The Installation is complete. Make the necessary adjustments for your application. Run a functional check to ensure proper operation.

Note: Maximum size envelopes should be run on Risograph Speed 1,2,or 3

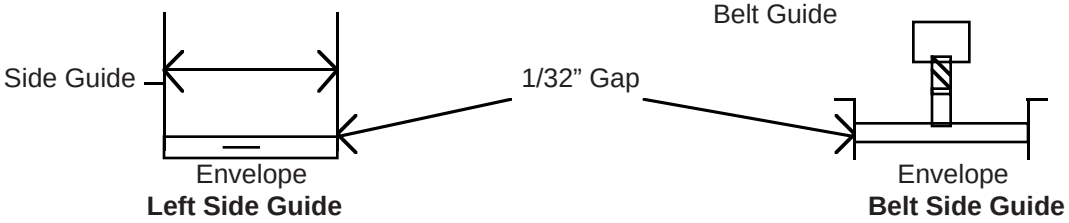
Adjustment Procedures

The Mode Switch turns on the AR8000 for setup also to operate the unit off-line from the Risograph. The Feed Switch and Speed Control are for Setup only. The Risograph will control the AR8000 speed during operation. The Feed Switch allows one envelope to feed. The Speed Control allows the operator to test the stock feed capabilities at various speeds.

1. Setting the Stripper Height:
The Stripper Height is set by placing one envelope beneath the Stripper and dropping the Stripper onto the Envelope. Next, tighten the Stripper Mounts. There are five Stripper Units. Only one set of Strippers are used at a time. Outer Strippers for large envelopes or two Inner Strippers for smaller envelopes. The Center stripper is used for feeding Card Stock.
If the Stripper Gap is too small: Skewing or improper feeding will result.
If the Stripper Gap is too large: Multiple Envelope feed or skewing may result.



2. Setting the Envelope Side Guides:
The Envelope Side Guides are designed to prevent skewing. Left side guides are adjusted by placing an envelope on the Feed Table and closing the side guides in- on the Envelope. The Belt Side Guides are adjusted by noting the Scale position of the Left Side Guide and placing the Belt Side Guides accordingly.
Note: The Belt Transport Motor has to be **ON** when adjusting the Belt Side Guides. Slide the Guides slowly or the Transport Belts may jump from their Positioning Guides.
A 1/32" gap is required between the envelope and side guide.
At this time you are ready to Test Feed one Envelope. Switch the Power on (press Mode) and press the belt rotation switch. The bottom envelope should feed to the Scraper and Pick-Up Roller of the Risograph. If not, re-adjust the Side Guides or Stripper Units.



3. Envelope Belt Guide Adjustment:

The Belt Guides hold the Envelopes down on the Transport Belts. To properly position the Belt Guides, place one Envelope underneath both front and rear guides, loosen the mounting thumbscrew until the Belt Guide has a slight drag on the Envelope. Tighten the Thumbscrew.

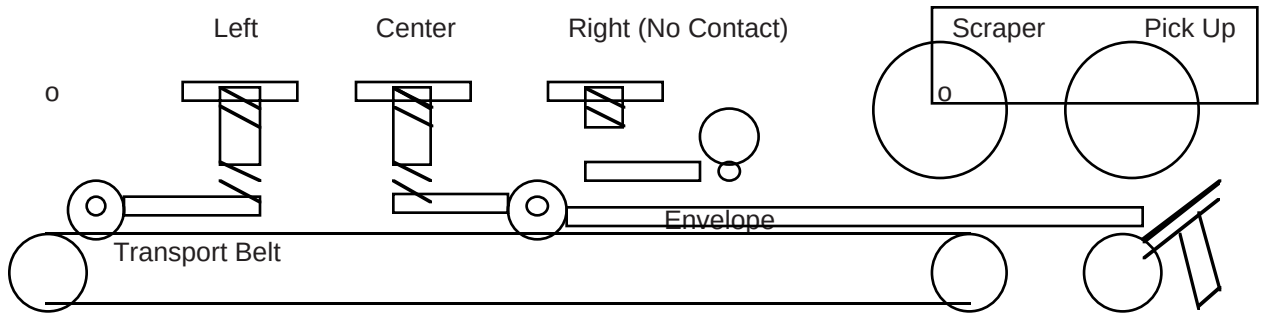
4. Metal Transport Rollers

Three metal transport rollers are responsible for transporting the envelope to the Feed Roller of the Risograph. The objective is to feed the envelop, until the envelope is in the bite of the RISO Feed Roller. There are 3 Transport Rollers. Depending upon the size of the envelopes, one, two or three Transport Rollers may be used. When the Transport Rollers are properly adjusted, the Roller should be at the trail edge of the envelope (riding on the Transport Belt of the AR8000) when the envelope is in the bite of the RISO Feed Roller. Each one of the three Metal Transport Rollers may be adjusted forward, back, up or down.

If the Right Transport Rollers is adjusted too low: Envelopes may accordion or bow.

If the Transport Rollers are adjusted too high: Envelopes will not feed to the Risograph Feed Rollers.

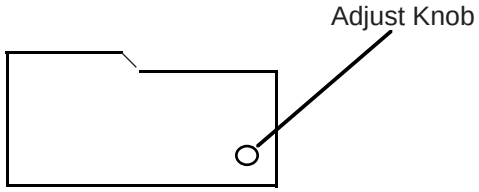
AR8000 **RISO**



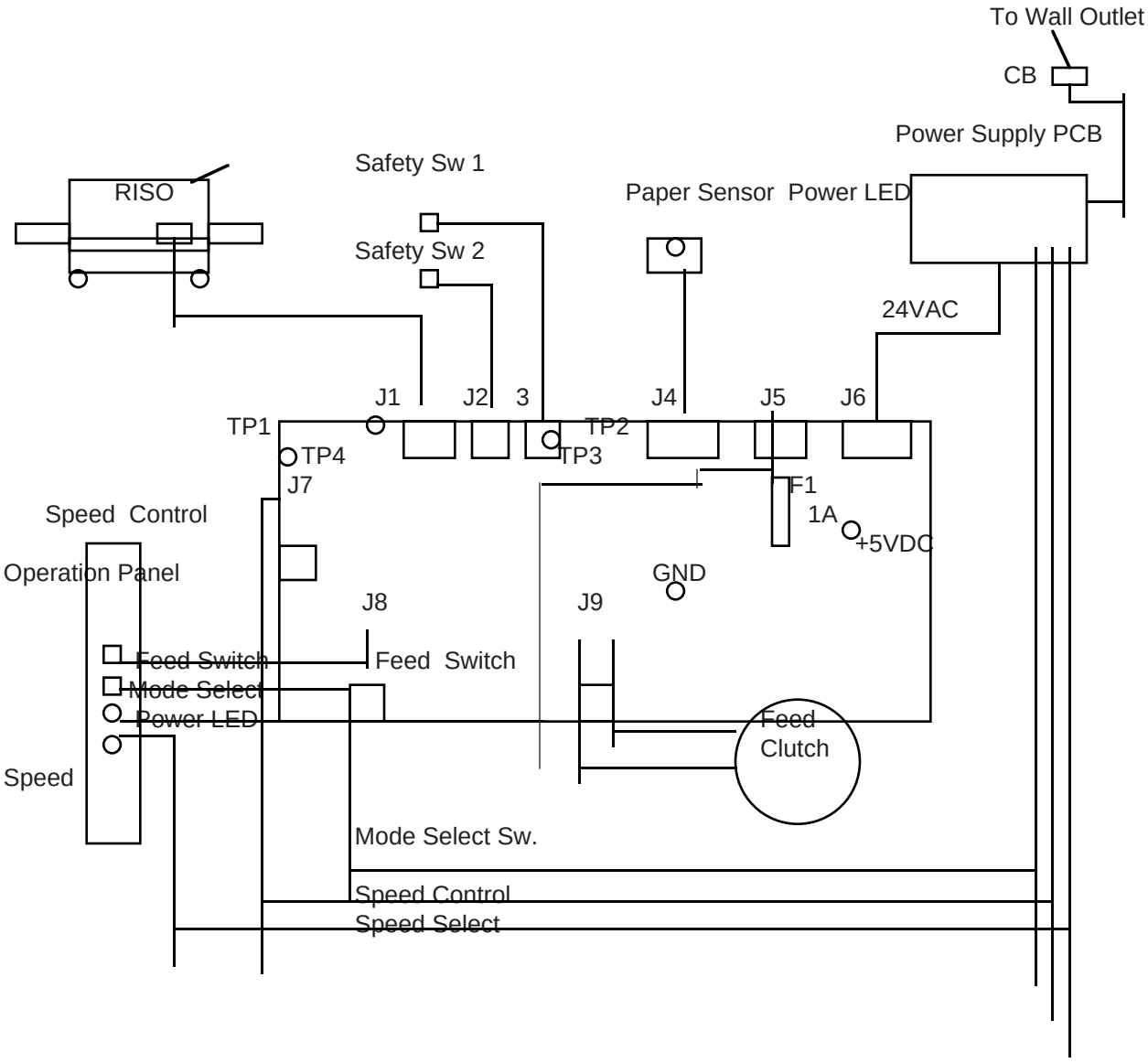
Note: Transport Rollers are adjustable Up, Down, Right or Left

5. Side to Side Registration:

Side to side (Horizontal Registration) is adjusted from the rotary dial at the front right base of the Feeder Unit. Clockwise brings the paper forward toward the operator, counter-clockwise brings the paper back toward the rear of the machine.



Point to Point Wiring Diagram



AR8000 Troubleshooting

Problem	Possible Cause
No Power	Check the wall outlet Check the AR8000 Circuit Breaker Check the Power Supply PCB or Main Fuse Check the Power Switch
Side to Side Registration out	Adjust Registration Dial AR8000
Media does not feed	Improper setup of Separator Glazed or dirty Feed Rollers Check Feed Clutch Operation Check Media Sensor for Proper Operation Is the Media Sensor exposed to light Check Replace Fuse 1 AR8000 Control PCB Replace the AR8000 Control PCB Improper Setting of the Metal Transport Rollers Side Guides too tight
Media skews when feeding	Side Guides too loose Strippers not set even Improper Setting of the Metal Transport Rollers Check for obstructions in Envelope Path
T2 Error Risograph	Ensure the AR8000 locks into the Risograph Check Safety Switch #1 and Safety Switch #2 Check / Replace the Interface Harness Check / Replace Control PCB